

L-Band Variable Crossover Non-Complementary Surface Mount Diplexer for GPS APT-DPX-2G



Applications

- GPS/PCS Receiver Front End
- Radar
- Wireless Basestations/ Infrastructure/handsets

Product Description

Features

- 1.0 to 6 GHz Frequency Range
- Typical Loss 0.6 dB
- Variable Crossover attenuation
- Non-complementary design
- Higher Channel Isolation and rejection with fewer elements
- Surface mount SMTO-8 pkg or 7mm QFN package

The APT-DPX-2G is a novel variable crossover, non-complementary diplexer that yields a low passband insertion loss, higher channel isolation, and higher rejection. This is due to the use of minimal number of high Q circuit elements to achieve the desired frequency response. The non-complementary, optimal design allows for easy selection of crossover frequency with the least number of components which reduces cost, complexity, and size while yielding the best perfor-

Key Specifications at +23°C

Parameter	Unit	Minimum	Typical	Maximum	Notes
Frequency	GHz	1.0	-	6.0	Customizable
High pass loss	dB	-	-0.5	-0.8	Customizable
Low Pass loss	dB	-	-0.3	±0.4	Customizable
X-over Atten	dB	-9	-9	-	Customizable
Outline/Package	-	-	-		SMT



Absolute Maximum Ratings*

Parameter	Unit	Minimum	Maximum	Notes
Operating Temperature (Case)	°C	-54	+85	95% humidity, non-condensing
Storage Temperature (Case)	°C	-54	+115	95% humidity, non-condensing
RF Input Power	dBm	-	33	CW

*Stresses above those listed under "Absolute Maximum Rating" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability

Typical Measured Data



Data taken with Agilent N5242 PNA-X Vector Network Analyzer



Typical Data (continued)



Data taken with Agilent N5242 PNA-X Vector Network Analyzer



Outline Drawing

